```
=> d his

     (FILE 'HOME' ENTERED AT 14:32:25 ON 15 NOV 2002)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 14:32:37 ON 15 NOV
     2002
L1          408 S PGK(W)(PROMOTER OR PROMOTOR OR REGULATORY(W)ELEMENT)
L2       208573 S TRANSGEN?
L3           77 S L1 AND L2
L4         3407 S FETAL(W)TISSUE(W)TRANSPLANTATION
L5        87133 S PARKINSON(2A)DISEASE
L6          661 S L4 AND L5
L7           57 S REVIEW AND L6
L8           52 DUP REM L7 (5 DUPLICATES REMOVED)

=> d au ti so 1-30 l8

L8   ANSWER 1 OF 52  CAPLUS  COPYRIGHT 2002 ACS
AU   Nakao, Naoyuki; Itakura, Toru
TI   Cell transplantation therapy for neurodegenerative disorders: from fetal
     tissue to neural stem cells
SO   Shinkei Kenkyu no Shinpo (2002), 46(2), 297-305
     CODEN: SKNSAF; ISSN: 0001-8724

L8   ANSWER 2 OF 52     MEDLINE
AU   Fricker-Gates R A; Lundberg C; Dunnett S B
TI   Neural transplantation: restoring complex circuitry in the striatum.
SO   Restor Neurol Neurosci, (2001) 19 (1-2) 119-38.  Ref: 232
     Journal code: 9005499. ISSN: 0922-6028.

L8   ANSWER 3 OF 52     MEDLINE
AU   Zesiewicz T A; Hauser R A
TI   Neurosurgery for Parkinson's disease.
SO   SEMINARS IN NEUROLOGY, (2001) 21 (1) 91-101.  Ref: 124
     Journal code: 8111343. ISSN: 0271-8235.

L8   ANSWER 4 OF 52     MEDLINE
AU   Borlongan C V
TI   Transplantation therapy for Parkinson's disease.
SO   EXPERT OPINION ON INVESTIGATIONAL DRUGS, (2000 Oct) 9 (10) 2319-30.  Ref:
     67
     Journal code: 9434197. ISSN: 1354-3784.

L8   ANSWER 5 OF 52     MEDLINE
AU   Lopez-Lozano J J; Mata M; Bravo G
TI   [Neural transplants en Parkinson disease: clinical
     results of 10 years of experience. Group of Neural Transplants of the
     CPH].
     Transplantes neurales en la enfermedad de Parkinson: resultados clinicos
     tras 10 anos de experiencia. Grupo de Trasplantes Neurales de la CPH.
SO   REVISTA DE NEUROLOGIA, (2000 Jun 1-15) 30 (11) 1077-83.
     Journal code: 7706841. ISSN: 0210-0010.

L8   ANSWER 6 OF 52     MEDLINE
AU   Barker R A
TI   Prospects for the treatment of Parkinson's disease
     using neural grafts.
SO   Expert Opin Pharmacother, (2000 Jul) 1 (5) 889-902.  Ref: 58
     Journal code: 100897346. ISSN: 1465-6566.

L8   ANSWER 7 OF 52     MEDLINE
AU   Mendez I; Baker K A; Hong M
TI   Simultaneous intrastriatal and intranigral grafting (double grafts) in the
```

rat model of **Parkinson's disease**.
SO BRAIN RESEARCH. BRAIN RESEARCH REVIEWS, (2000 Apr) 32 (1) 328-39.
Journal code: 8908638. ISSN: 0165-0173.

L8 ANSWER 8 OF 52 MEDLINE
AU Larsson L C; Widner H
TI Neural tissue xenografting.
SO SCANDINAVIAN JOURNAL OF IMMUNOLOGY, (2000 Sep) 52 (3) 249-56. Ref: 64
Journal code: 0323767. ISSN: 0300-9475.

L8 ANSWER 9 OF 52 MEDLINE
AU Barker R A; Kendall A L; Widner H
TI Neural tissue xenotransplantation: what is needed prior to clinical trials in **Parkinson's disease**? Neural Tissue Xenografting Project.
SO CELL TRANSPLANTATION, (2000 Mar-Apr) 9 (2) 235-46. Ref: 74
Journal code: 9208854. ISSN: 0963-6897.

L8 ANSWER 10 OF 52 MEDLINE
AU Brundin P; Karlsson J; Emgard M; Schierle G S; Hansson O; Petersen A; Castilho R F
TI Improving the survival of grafted dopaminergic neurons: a **review** over current approaches.
SO CELL TRANSPLANTATION, (2000 Mar-Apr) 9 (2) 179-95. Ref: 151
Journal code: 9208854. ISSN: 0963-6897.

L8 ANSWER 11 OF 52 MEDLINE
AU Bjorklund A
TI Cell replacement strategies for neurodegenerative disorders.
SO NOVARTIS FOUNDATION SYMPOSIUM, (2000) 231 7-15; discussion 16-20. Ref: 39
Journal code: 9807767.

L8 ANSWER 12 OF 52 MEDLINE
AU Bjorklund A; Lindvall O
TI [Transplanted nerve cells survive and are functional for many years]. Transplanterade nervceller lever och fungerar i manga ar.
SO LAKARTIDNINGEN, (1999 Aug 11) 96 (32-33) 3407-12. Ref: 20
Journal code: 0027707. ISSN: 0023-7205.

L8 ANSWER 13 OF 52 MEDLINE DUPLICATE 1
AU Clarkson E D; Freed C R
TI Development of fetal neural transplantation as a treatment for **Parkinson's disease**.
SO LIFE SCIENCES, (1999 Oct 29) 65 (23) 2427-37. Ref: 62
Journal code: 0375521. ISSN: 0024-3205.

L8 ANSWER 14 OF 52 MEDLINE
AU Wyman T; Rohrer D; Kirigiti P; Nichols H; Pilcher K; Nilaver G; Machida C
TI Promoter-activated expression of nerve growth factor for treatment of neurodegenerative diseases.
SO GENE THERAPY, (1999 Oct) 6 (10) 1648-60. Ref: 111
Journal code: 9421525. ISSN: 0969-7128.

L8 ANSWER 15 OF 52 MEDLINE
AU Macklin R
TI The ethical problems with sham surgery in clinical research.
SO NEW ENGLAND JOURNAL OF MEDICINE, (1999 Sep 23) 341 (13) 992-6.
Journal code: 0255562. ISSN: 0028-4793.
Report No.: KIE-63223.

L8 ANSWER 16 OF 52 MEDLINE
AU Freeman T B; Vawter D E; Leaverton P E; Godbold J H; Hauser R A; Goetz C G; Olanow C W
TI Use of placebo surgery in controlled trials of a cellular-based therapy

for **Parkinson**'s **disease**.
SO NEW ENGLAND JOURNAL OF MEDICINE, (1999 Sep 23) 341 (13) 988-92.
Journal code: 0255562. ISSN: 0028-4793.
Report No.: KIE-63222.

L8 ANSWER 17 OF 52 MEDLINE
AU Yadid G; Fitoussi N; Kinor N; Geffen R; Gispan I
TI Astrocyte line SVG-TH grafted in a rat model of **Parkinson**'s **disease**.
SO PROGRESS IN NEUROBIOLOGY, (1999 Dec) 59 (6) 635-61. Ref: 276
Journal code: 0370121. ISSN: 0301-0082.

L8 ANSWER 18 OF 52 MEDLINE
AU Dunnett S B
TI Repair of the damaged brain. The Alfred Meyer Memorial Lecture 1998.
SO NEUROPATHOLOGY AND APPLIED NEUROBIOLOGY, (1999 Oct) 25 (5) 351-62. Ref: 69
Journal code: 7609829. ISSN: 0305-1846.

L8 ANSWER 19 OF 52 MEDLINE
AU Obeso J A; Linazasoro G; Gorospe A; Rodriguez M C; Guridi J; Ramos E
TI [Pathophysiological bases, clinical results and indications for surgical treatment in **Parkinson disease**].
Bases fisiopatologicas, resultados clinicos e indicaciones del tratamiento quirurgico de la enfermedad de Parkinson.
SO NEUROLOGIA, (1999 May) 14 Suppl 1 54-71. Ref: 106
Journal code: 9005460. ISSN: 0213-4853.

L8 ANSWER 20 OF 52 MEDLINE
AU Serrano-Sanchez T; Diaz-Armesto I
TI [Brain-derived growth factor: current aspects].
Factor de crecimiento derivado del cerebro: aspectos de actualidad.
SO REVISTA DE NEUROLOGIA, (1998 Jun) 26 (154) 1027-32. Ref: 79
Journal code: 7706841. ISSN: 0210-0010.

L8 ANSWER 21 OF 52 MEDLINE
AU Starr P A; Vitek J L; Bakay R A
TI Ablative surgery and deep brain stimulation for **Parkinson**'s **disease**.
SO NEUROSURGERY, (1998 Nov) 43 (5) 989-1013; discussion 1013-5. Ref: 199
Journal code: 7802914. ISSN: 0148-396X.

L8 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2002 ACS
AU Sanberg, Paul R.; Willing, Alison E.
TI Cellular therapeutic approaches for neurodegenerative disorders
SO Nucleic Acids Symposium Series (1998), 38(Advances in Gene Technology: Molecular Biology in the Conquest of Disease), 139-142
CODEN: NACSD8; ISSN: 0261-3166

L8 ANSWER 23 OF 52 MEDLINE
AU Pogarell O; Oertel W H
TI Neural transplantation in **Parkinson**'s **disease** and its effects on rest tremor: a **review** of the literature.
SO MOVEMENT DISORDERS, (1998) 13 Suppl 3 101-2. Ref: 14
Journal code: 8610688. ISSN: 0885-3185.

L8 ANSWER 24 OF 52 MEDLINE
AU Prasad K N; Clarkson E D; La Rosa F G; Edwards-Prasad J; Freed C R
TI Efficacy of grafted immortalized dopamine neurons in an animal model of parkinsonism: a **review**.
SO MOLECULAR GENETICS AND METABOLISM, (1998 Sep) 65 (1) 1-9. Ref: 66
Journal code: 9805456. ISSN: 1096-7192.

L8 ANSWER 25 OF 52 MEDLINE

AU Kanelos S K; McDeavitt J T
TI Neural transplantation: potential role in traumatic brain injury.
SO JOURNAL OF HEAD TRAUMA REHABILITATION, (1998 Dec) 13 (6) 1-9. Ref: 36
Journal code: 8702552. ISSN: 0885-9701.

L8 ANSWER 26 OF 52 MEDLINE DUPLICATE 2
AU Borlongan C V; Koutouzis T K; Jorden J R; Martinez R; Rodriguez A I; Poulos S G; Freeman T B; McKeown P; Cahill D W; Nishino H; Sanberg P R
TI Neural transplantation as an experimental treatment modality for cerebral ischemia.
SO NEUROSCIENCE AND BIOBEHAVIORAL REVIEWS, (1997 Jan) 21 (1) 79-90. Ref: 96
Journal code: 7806090. ISSN: 0149-7634.

L8 ANSWER 27 OF 52 MEDLINE
AU Brooks D J
TI PET and SPECT studies in **Parkinson**'s **disease**.
SO BAILLIERES CLINICAL NEUROLOGY, (1997 Apr) 6 (1) 69-87. Ref: 99
Journal code: 9214291. ISSN: 0961-0421.

L8 ANSWER 28 OF 52 MEDLINE
AU Rehncrona S
TI A critical **review** of the current status and possible developments in brain transplantation.
SO ADVANCES AND TECHNICAL STANDARDS IN NEUROSURGERY, (1997) 23 3-46. Ref: 133
Journal code: 7501064. ISSN: 0095-4829.

L8 ANSWER 29 OF 52 MEDLINE
AU Shetty A K; Turner D A
TI Development of fetal hippocampal grafts in intact and lesioned hippocampus.
SO PROGRESS IN NEUROBIOLOGY, (1996 Dec) 50 (5-6) 597-653. Ref: 355
Journal code: 0370121. ISSN: 0301-0082.

L8 ANSWER 30 OF 52 MEDLINE
AU Chisholm A H
TI **Fetal tissue transplantation** for the treatment of **Parkinson**'s **disease**: a **review** of the literature.
SO JOURNAL OF NEUROSCIENCE NURSING, (1996 Oct) 28 (5) 329-38. Ref: 34
Journal code: 8603596. ISSN: 0888-0395.

=> d 3 4 6-11 au ti so ab l8

L8 ANSWER 3 OF 52 MEDLINE
AU Zesiewicz T A; Hauser R A
TI Neurosurgery for **Parkinson**'s **disease**.
SO SEMINARS IN NEUROLOGY, (2001) 21 (1) 91-101. Ref: 124
Journal code: 8111343. ISSN: 0271-8235.
AB Medical therapy for **Parkinson**'s **disease** (PD) often becomes inadequate over several years. Disability increases despite maximal medical management and many patients develop motor fluctuations and dyskinesia. In addition, medications provide good control of tremor in only 50% of cases. In appropriately selected cases, surgical therapies for PD provide benefit for medically refractory symptoms. Recent advances have provided a greater array of surgical options. Unilateral thalamotomy and thalamic stimulation are considered safe and effective procedures to treat contralateral tremor. Pallidotomy and pallidal stimulation primarily reduce contralateral dyskinesia, with lesser effects on bradykinesia and rigidity. Studies indicate that subthalamic nucleus (STN) stimulation improves "off" period function, decreases "off" time, and lessens dyskinesia. Fetal cell transplantation remains experimental, and studies are underway to evaluate the safety and efficacy of porcine fetal cell and

human retinal pigment epithelial cell transplantation. This chapter **reviews** the history of surgical procedures for PD, describes current procedures, and offers a look into the future of neurosurgical options for PD.

L8 ANSWER 4 OF 52 MEDLINE
AU Borlongan C V
TI Transplantation therapy for **Parkinson**'s **disease**.
SO EXPERT OPINION ON INVESTIGATIONAL DRUGS, (2000 Oct) 9 (10) 2319-30. Ref: 67
Journal code: 9434197. ISSN: 1354-3784.
AB This **review** paper will provide an overview of the advent of neural transplantation therapy and the milestones achieved over the last 20 years for its use in treating **Parkinson**'s **disease**. A discussion of technical factors that influence the outcome of neural transplantation is presented, with emphasis given on three sections dealing with immunosuppressants, alternative grafts and trophic factors which have recently been the focus of basic research and development of early phase clinical trials. Some views on the clinical assessment of transplanted **Parkinson**'s **disease** patients are given at the end of the paper, with a synopsis highlighting the importance of basic research in advancing the potential clinical benefits of neural transplantation therapy in the treatment of **Parkinson**'s **disease**.

L8 ANSWER 6 OF 52 MEDLINE
AU Barker R A
TI Prospects for the treatment of **Parkinson**'s **disease** using neural grafts.
SO Expert Opin Pharmacother, (2000 Jul) 1 (5) 889-902. Ref: 58
Journal code: 100897346. ISSN: 1465-6566.
AB **Parkinson**'s **disease** (PD) is an incurable neurodegenerative condition of the central nervous system (CNS) that typically presents in the fifth to seventh decade of life, with a movement disorder that consists of a resting tremor, bradykinesia and rigidity. It is a disease that can only be diagnosed with certainty at postmortem when the pathological hallmark is loss of the dopaminergic nigrostriatal pathway and presence of Lewy bodies in the substantia nigra. However, pathological changes, including Lewy body formation, are found outside of the nigrostriatal system and involve other neurotransmitters, which may also account for some of the cognitive, psychiatric and autonomic abnormalities in these patients. To date, the mainstay of treatment for patients with PD has been drugs that activate the dopaminergic network, namely the dopamine precursor L-dopa and dopamine receptor agonists. However, recently interest has turned towards more curative therapies, including the use of grafts of neural tissue to replace dopaminergic neurones that have been lost. This approach has now entered clinical trials and this **review** will analyse the therapeutic approach of neural grafting in PD.

L8 ANSWER 7 OF 52 MEDLINE
AU Mendez I; Baker K A; Hong M
TI Simultaneous intrastriatal and intranigral grafting (double grafts) in the rat model of **Parkinson**'s **disease**.
SO BRAIN RESEARCH. BRAIN RESEARCH REVIEWS, (2000 Apr) 32 (1) 328-39.
Journal code: 8908638. ISSN: 0165-0173.
AB Experimental and clinical studies of neural transplantation in **Parkinson**'s **disease** have focused on the placement of fetal dopaminergic grafts not in their ontogenic site (substantia nigra) but in the main nigral target area (striatum). The reason for this is the apparent inability of intranigral nigral grafts to extend axons for long distances reinnervating the ipsilateral striatum. This **review** presents previous work by our laboratory [I. Mendez, M. Hong, Reconstruction of the striato-nigro-striatal circuitry by simultaneous

double dopaminergic grafts: a tracer study using fluorogold and horseradish peroxidase, Brain Res. 778 (1997) 194-205; I. Mendez, D. Sadi, M. Hong., Reconstruction of the nigrostriatal pathway by simultaneous intrastriatal and intranigral dopaminergic transplants, J. Neurosci. 16 (1996) 7216-7227] using a new transplantation strategy aimed at restoring dopaminergic innervation of the nigra and striatum by simultaneous dopaminergic transplants placed in the substantia nigra and ipsilateral striatum (double grafts) in the 6-hydroxydopamine lesioned adult rat brain. These double grafts achieve not only greater striatal reinnervation than the standard intrastriatal grafts but also produce a faster and more complete behavioural recovery six weeks after transplantation. Injection of the retrograde tracer fluorogold into the striatum and nigra resulted in fluorescent labeled cells within the intranigral graft and the intrastriatal graft and surrounding striatum, respectively suggesting that these double grafts promote at least partial reconstruction of the nigrostriatal dopaminergic pathway. This double graft strategy may have potential implications in clinical neural transplantation for **Parkinson**'s **disease**.

L8 ANSWER 8 OF 52 MEDLINE
AU Larsson L C; Widner H
TI Neural tissue xenografting.
SO SCANDINAVIAN JOURNAL OF IMMUNOLOGY, (2000 Sep) 52 (3) 249-56. Ref: 64
Journal code: 0323767. ISSN: 0300-9475.
AB Neural transplantation may become an important treatment alternative for focal brain disorders. To date, the most successful grafts have been obtained in patients with **Parkinson**'s **disease**.
Completely normalized dopamine production and reduction of Parkinsonian symptoms have been demonstrated 10 years after grafting. However, the allogeneic donor tissue has to be obtained from induced abortions, and there are logistical difficulties, risks of infection, and ethical constraints limiting a wider clinical use. Xenografting is an alternative that could bridge these limitations if immunological rejection could be prevented. Pig embryonic neural tissue has been grafted to patients with **Parkinson**'s **disease**, but no functional benefits have clinically been proven so far. The immune reactions to neural xenografts were incompletely characterized at the time of these early clinical trials, and it is likely that the treatments used were insufficient and that the grafts were rejected. In this article we will **review** new experiments addressing the immune responses against porcine neural tissue grafted to the adult brain, including the role of antibodies, complement, natural killer (NK) cells, lymphocytes, as well as the effects of immunosuppressive drugs and donor tissue modifications.

L8 ANSWER 9 OF 52 MEDLINE
AU Barker R A; Kendall A L; Widner H
TI Neural tissue xenotransplantation: what is needed prior to clinical trials in **Parkinson**'s **disease**? Neural Tissue Xenografting Project.
SO CELL TRANSPLANTATION, (2000 Mar-Apr) 9 (2) 235-46. Ref: 74
Journal code: 9208854. ISSN: 0963-6897.
AB Embryonic allografted human tissue in patients with **Parkinson**'s **disease** has been shown to survive and ameliorate many of the symptoms of this disease. Despite this success, the practical problems of using this tissue coupled to the ethical restrictions of using aborted human fetal tissue have lead to an exploration for alternative sources of suitable material for grafting, including xenogeneic embryonic dopaminergic-rich neural tissue. Nevertheless, xenografted neural tissue itself generates a number of practical, ethical, safety, and immunological issues that have to be addressed prior to any clinical xenotransplant program. In this article we **review** these critical issues and set out the criteria that we consider need to be met in the development of our clinical xenotransplantation research programs. We advocate that these, or similar, criteria should be adopted and made explicit by other centers

contemplating similar clinical trials.

L8 ANSWER 10 OF 52 MEDLINE
AU Brundin P; Karlsson J; Emgard M; Schierle G S; Hansson O; Petersen A; Castilho R F
TI Improving the survival of grafted dopaminergic neurons: a **review** over current approaches.
SO CELL TRANSPLANTATION, (2000 Mar-Apr) 9 (2) 179-95. Ref: 151
Journal code: 9208854. ISSN: 0963-6897.
AB Neural transplantation is developing into a therapeutic alternative in **Parkinson**'s **disease**. A major limiting factor is that only 3-20% of grafted dopamine neurons survive the procedure. Recent advances regarding how and when the neurons die indicate that events preceding actual tissue implantation and during the first week thereafter are crucial, and that apoptosis plays a pivotal role. Triggers that may initiate neuronal death in grafts include donor tissue hypoxia and hypoglycemia, mechanical trauma, free radicals, growth factor deprivation, and excessive extracellular concentrations of excitatory amino acids in the host brain. Four distinct phases during grafting that can involve cell death have been identified: retrieval of the embryo; dissection and preparation of the donor tissue; implantation procedure followed by the immediate period after graft injection; and later stages of graft maturation. During these phases, cell death processes involving free radicals and caspase activation (leading to apoptosis) may be triggered, possibly involving an increase in intracellular calcium. We **review** different approaches that reduce cell death and increase survival of grafted neurons, typically by a factor of 2-4. For example, changes in transplantation procedure such as improved media and implantation technique can be beneficial. Calcium channel antagonists such as nimodipine and flunarizine improve nigral graft survival. Agents that counteract oxidative stress and its consequences, such as superoxide dismutase overexpression, and lazaroids can significantly increase the survival of transplanted dopamine neurons. Also, the inhibition of apoptosis by a caspase inhibitor has marked positive effects. Finally, basic fibroblast growth factor and members of the transforming growth factor-beta superfamily, such as glial cell line-derived neurotrophic factor, significantly improve the outcome of nigral transplants. These recent advances provide hope for improved survival of transplanted neurons in patients with **Parkinson**'s **disease**, reducing the need for human embryonic donor tissue and increasing the likelihood of a successful outcome.

L8 ANSWER 11 OF 52 MEDLINE
AU Bjorklund A
TI Cell replacement strategies for neurodegenerative disorders.
SO NOVARTIS FOUNDATION SYMPOSIUM, (2000) 231 7-15; discussion 16-20. Ref: 39
Journal code: 9807767.
AB Cell transplantation has over the last two decades emerged as a promising approach for restoration of function in neurodegenerative **diseases**, in particular **Parkinson**'s and Huntington's disease. Clinical trials have so far focused on the use of implants of embryonic mesencephalic tissue containing already fate-committed dopaminergic neuroblasts with the capacity to develop into fully mature dopamine neurons in their new location in the host brain. However, the recent demonstration that immature neural progenitor cells with multipotent properties can be isolated from both the developing and adult CNS and that these cells can be maintained and propagated in culture, has provided a new interesting tool for restorative cell replacement and gene transfer therapies. Embryonic stem cells, obtained from the early stages of embryonic development, and neural stem cells, obtained from the developing brain, may provide renewable sources of cells for therapeutic purposes, and could eventually offer a powerful alternative to primary fetal CNS tissue in clinical transplantation protocols. The purpose of this **review** is to discuss the prospects of the emerging progenitor cell

technology for cell replacement and restorative therapies in neurodegenerative diseases, and consider some of the critical issues that must be solved in order to make progenitor cells useful in studies of brain repair.

=>

```
=> d his

     (FILE 'HOME' ENTERED AT 14:32:25 ON 15 NOV 2002)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 14:32:37 ON 15 NOV
     2002
L1          408 S PGK(W)(PROMOTER OR PROMOTOR OR REGULATORY(W)ELEMENT)
L2       208573 S TRANSGEN?
L3           77 S L1 AND L2
L4         3407 S FETAL(W)TISSUE(W)TRANSPLANTATION
L5        87133 S PARKINSON(2A)DISEASE
L6          661 S L4 AND L5
L7           57 S REVIEW AND L6
L8           52 DUP REM L7 (5 DUPLICATES REMOVED)
L9         3611 S TRANSGEN?(8A)(KONCKOUT OR DELET? OR DIMINISH?)
L10           4 S L1 AND L9
L11           2 DUP REM L10 (2 DUPLICATES REMOVED)
L12        7176 S TRANSGEN?(8A)(KNOCKOUT OR DELET? OR DIMINISH?)
L13           4 S L1 AND L12
L14           2 DUP REM L13 (2 DUPLICATES REMOVED)
L15         677 S PGK(3A)(PROMOTER OR PROMOTOR OR REGULATORY(W)ELEMENT)
L16           8 S L12 AND L15
L17           6 DUP REM L16 (2 DUPLICATES REMOVED)

=> d au ti so 1-6 l17

L17  ANSWER 1 OF 6     MEDLINE                              DUPLICATE 1
AU   Murakami Pete; Pungor Erno; Files Jim; Do Linh; Van Rijnsoever Richard;
     Vogels Ronald; Bout Abraham; McCaman Michael
TI   A single short stretch of homology between adenoviral vector and packaging
     cell line can give rise to cytopathic effect-inducing, helper-dependent
     e1-positive particles.
SO   HUMAN GENE THERAPY, (2002 May 20) 13 (8) 909-20.
     Journal code: 9008950. ISSN: 1043-0342.

L17  ANSWER 2 OF 6  CAPLUS  COPYRIGHT 2002 ACS
IN   Cibelli, Jose; Good, Deborah J.
TI   Prion-free transgenic ungulates bearing a deletion or
     disruption of the prion gene and not susceptible to prion-related diseases
     and their use
SO   PCT Int. Appl., 77 pp.
     CODEN: PIXXD2

L17  ANSWER 3 OF 6  CAPLUS  COPYRIGHT 2002 ACS
IN   Luo, Tianci; Berkowitz, Robert David; Kaleko, Michael
TI   Bovine immunodeficiency virus (BIV) based vectors for transferring a gene
     of interest into a mammalian cell
SO   PCT Int. Appl., 60 pp.
     CODEN: PIXXD2

L17  ANSWER 4 OF 6  CAPLUS  COPYRIGHT 2002 ACS
AU   Miyazaki, Junichi
TI   Technical progress in knock-out mice production
SO   Diabetes Frontier (2001), 12(1), 115-122
     CODEN: DIFREZ; ISSN: 0915-6593

L17  ANSWER 5 OF 6  CAPLUS  COPYRIGHT 2002 ACS
IN   Soriano, Philippe; Robertson, Elizabeth J.
TI   Use of site-specific excision of transforming DNA to inactivate genes or
     place reporter genes under the control of constitutive promoters
SO   PCT Int. Appl., 83 pp.
     CODEN: PIXXD2

L17  ANSWER 6 OF 6  CAPLUS  COPYRIGHT 2002 ACS
```

AU Lallemand, Yvan; Luria, Victor; Haffner-Krausz, Rebecca; Lonai, Peter
TI Maternally expressed PGK-Cre transgene as a tool for early and uniform activation of the Cre site-specific recombinase
SO Transgenic Research (1998), 7(2), 105-112
CODEN: TRSEES; ISSN: 0962-8819

=> d ab 5 6 l17

L17 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2002 ACS
AB Methods for generating **transgenic** non-human animals with a defined **deletion** or with a **transgene**, esp. a reporter gene, under control of a defined promoter are described. This allows genes of interest to be expressed from previously identified promoters, or it allows the generation of homozygous or heterozygous null mutants at a defined locus. The cre/loxP system is used to generate targeted deletions. The transforming DNA carrying loxP sites is integrated at a target site by homologous recombination and transgenic animals are crossed with animals carrying a cre gene leading to elimination of the loxP-flanked sites from the zygote. If the cre gene is expressed from a constitutive promoter, then it will ensure deletion of the target sequence from all tissues. Animals with the cre gene under control of a regulatable promoter are also described. Specifically, the Cre gene is inserted into the ROSA26 locus of mouse. The general reporter animals have a gene intended for removal flanked by sites recognized by the recombinase. The flanking sequence is linked to a marker or reporter gene that is expressed when the sequence is deleted. The use of the method to place reporter genes under control of the promoters of ROSA (reverse orientation, splice acceptor) genes is demonstrated.

L17 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2002 ACS
AB A transgenic mouse strain with early and uniform expression of the Cre site-specific recombinase is described. In this strain, PGK-Crem, Cre is driven by the early acting **PGK**-1 **promoter**, but, probably due to cis effects at the integration site, the recombinase is under dominant maternal control. When Cre is transmitted by PGK-Crem females mated to males that carry a reporter transgene flanked by loxP sites, even offspring that do not inherit PGK-Cre delete the target gene. It follows that in the PGK-Crem female Cre activity commences in the diploid phase of oogenesis. In PGK-Crem crosses complete recombination was obsd. in all organs, including testis and ovary. We prepd. a mouse stock that is homozygous for PGK-Crem and at the albino (c) locus. This strain will be useful for the early and uniform induction of ectopic and dominant neg. mutations, for the in vivo removal of selective elements from targeted mutations and in connection with the manipulation of targeted loci in 'knock in' and related technologies.

=> d bib 5 l17

L17 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1999:672968 CAPLUS
DN 131:307667
TI Use of site-specific excision of transforming DNA to inactivate genes or place reporter genes under the control of constitutive promoters
IN Soriano, Philippe; Robertson, Elizabeth J.
PA Fred Hutchinson Cancer Research Center, USA
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

```
PI   WO 9953017          A2   19991021       WO 1999-US8154   19990414
     WO 9953017          A3   19991202
         W:  CA, JP
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     EP 1071471          A2   20010131       EP 1999-918541   19990414
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 6461864          B1   20021008       US 1999-291541   19990414
PRAI US 1998-81894P      P    19980415
     WO 1999-US8154      W    19990414


=>
```